

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
4 March 2004 (04.03.2004)

PCT

(10) International Publication Number
WO 2004/017896 A3

- (51) International Patent Classification⁷: **A61K 31/517**, 31/538, 31/42, 31/35
- (21) International Application Number:
PCT/US2003/025434
- (22) International Filing Date: 15 August 2003 (15.08.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/404,963 21 August 2002 (21.08.2002) US
- (71) Applicant (for all designated States except US): **MERCK & CO., INC.** [US/US]; 126 East Lincoln Avenue, Rahway, NJ 07065-0907 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **WALDSTREICHER, Joanne** [US/US]; 126 East Lincoln Avenue, Rahway, NJ 07065-0907 (US). **FOX, Jonathan, C.** [US/US]; 126 East Lincoln Avenue, Rahway, NJ 07065-0907 (US). **MERCURI, Michele** [IT/US]; 126 East Lincoln Avenue, Rahway, NJ 07065-0907 (US).
- (74) Common Representative: **MERCK & CO., INC.**; 126 East Lincoln Avenue, Rahway, NJ 07065-0907 (US).
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:**
— with international search report
— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report:
8 July 2004
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: COMBINATION THERAPY USING A DUAL PPAR ALPHA/GAMMA AGONIST AND AN ANGIOTENSIN II TYPE I RECEPTOR ANTAGONIST

(57) Abstract: The present invention relates to the treatment of hypertension and type 2 diabetes, Metabolic Syndrome or a pre-diabetic state, by the administration of a therapeutically effective amount of a combination of a dual PPAR α/γ agonist and an Angiotensin II type I receptor antagonist, including pharmaceutically acceptable salts and solvates of said active ingredients.

WO 2004/017896 A3

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/25434

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61K 31/517, 31/538, 31/42, 31/35
US CL : 514/373, 379, 456, 230.5, 375, 394

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 514/373, 379, 456, 230.5, 375, 394

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2003/0092736 A1 (CHENG et al) 15 May 2003 (15.05.2003), see entire documents, especially claim 15.	1-8, 10-19
Y	US 2002/0103242 A1 (SAHOO et al) 01 August 2002 (01.08.2002), see entire documents, especially claims 46 and 55.	1-19
Y	US 6,569,879 B2 (LIU et al) 27 May 2003 (27.05.2003), see entire documents, especially claims 20 and 30.	1-19

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance
"B" earlier application or patent published on or after the international filing date
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
"O" document referring to an oral disclosure, use, exhibition or other means
"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"&" document member of the same patent family

Date of the actual completion of the international search

18 April 2004 (18.04.2004)

Date of mailing of the international search report

11 MAY 2004

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
Facsimile No. (703) 305-3230

Authorized officer

Brian Kwon

Telephone No. 703-308-1235

INTERNATIONAL SEARCH REPORT

PCT/US03/25434

Continuation of B. FIELDS SEARCHED Item 3:

STN ONLINE

Search terms: PPAR alpha/gamma, antiotensin II type I receptor (A-2) antagonist, KRP-297, ACE inhibitors, HMG-CoA, losartan